

Overview

HPE Adaptive Rack Cooling System

The HPE Adaptive Rack Cooling System is a closed loop cooling system that removes the high levels of heat generated by today's servers, mass storage, and core networking hardware. The HPE Adaptive Rack Cooling System allows for simultaneous cooling of up to four racks and 150kW of IT capacity when used in conjunction with the HPE Adaptive Rack Cooling System 42U or 48U racks.

HPE Adaptive Rack Cooling System is designed to complement any new or existing datacenter by enabling computing power growth without adding to the heat load in the datacenter. In addition, by allowing equivalent cooling capacity as commodity DLC, the HPE Adaptive Rack Cooling System will extend, considerably, the life of your datacenter. The horizontal air flow of the HPE Adaptive Rack Cooling System fully supports industry-standard front-to-back cooling designs and standard server dimensions. Additionally, the implementation of variable speed fans within the system enables improved energy efficiencies while providing all devices the right volume of airflow, regardless of the mounting position or workload.



HPE Adaptive Rack Cooling System with 42u Rack Options

Overview

Key Features

General Solution:

- Self-contained, (closed-coupled) solution that supports up to 4 full racks of IT
- Closed-coupled cooling ensures uniform horizontal airflow

Cooling Capacity:

- Up to 150kW cooling capacity or 110kW in an N+1 fan configuration

Water:

- Supports 7C to 32C Facility inlet water temp

Efficiency:

- Warm water cooling ready: support IT loads up to 75 kW at 30°C inlet water with 70 gallons per minute (GPM) and a server supply air temperature of 35°C.
- Includes four front, swappable fans, per high efficiency heat exchanger resulting in a pPUE as low as 1.05

Power:

- Input power support for 380V-480VAC(3-phase)
- Automatic Transfer Switch providing redundant power input

Availability and Reliability:

- Advanced condensate management
- Integrated automatic door opening system (optional) and remote environmental monitor
- Supports HPCM

Flexibility:

- Extend cooling up to four racks with optional HPE Apollo 42U or 48U ARCS racks for IT equipment (optional)
- HPE Apollo 42U or 48U racks for IT equipment are supporting shipping of fully integrated rack solutions (HPE Factory Express or Partner rack integration) as these are delivered on shock pallet
- Underfloor and overhead plumbing capabilities
- Full services offering available, including planning, deployment and maintenance

For Site Prep Guide Please Visit Link:

https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00046603en_us&docLocale=en_US

Models

HPE Modular Cooling System 300 Rack

P9E36A

HPE ARCS Air Cooling Unit Rack

Q7M86A

HPE ARC Unit (P9E36A,Q7M86A) includes:

- Adaptive Rack Cooling Unit with up to 150kW Capacity or 110kW (N+1),
 - 1200mm x 600mm cooling base.
 - 127mm front extension and 254mm rear extension
 - 4 Fans for 10,000 CFM or 7,500 CFM (N+1)
 - 7 inch LCD Touchscreen
 - Transfer Switch
 - Condensate Pump
-

Configuration Information

HPE ARCS 42U 600x1600mm Rack

HPE ARCS 42U 600x1600mm Rack

Q8L41A

NOTE: Optional IT Rack (42U) for the HPE ARC System – ships on shock pallet – ships separately from the Cooling unit

HPE ARCS 48U 600x1600mm Rack

HPE ARCS 48U 600x1600mm Rack

Q7G92A

NOTE: Optional IT Rack (42U) for the HPE ARC System – ships on shock pallet – ships separately from the Cooling unit

HPE ARCS Auto Door Controller Kit

HPE ARCS Auto Door Controller Kit

P06116-B21

NOTE: Requires 1 kit per cooling unit (P9E36A or Q7M86A) which supports up to 4 racks.

NOTE: Requires 1 HPE ARCS Auto Door Release Kit (P00674-B21) per rack.

NOTE: In redundant cooling unit configs, only 1 cooling unit controls the Auto Door Release.

HPE ARCS Auto Door Release Kit

HPE ARCS Auto Door Release Kit

P00674-B21

NOTE: Requires 1 Kit per ARCS rack and 1 Auto Door Controller Kit per cooling unit (P06116-B21).

NOTE: In redundant cooling unit configs, only 1 cooling unit controls the Auto Door Release.

HPE ARCS 42U Air Rack Installation Kit

HPE ARCS 42U Air Rack Installation Kit

P04444-B21

NOTE: 1 Rack installation Kit per contiguous ARCS system row.

HPE ARCS 48U Air Rack Installation Kit

HPE ARCS 48U Air Rack Installation Kit

P05408-B21

NOTE: 1 Rack installation Kit per cooling unit (P9E36A or Q7M86A) when configured with 48U ARCS racks.

HPE ARCS Water Hookup Kit

HPE ARCS Water Hookup Kit

P00675-B21

NOTE: Requires 1 kit per cooling unit (P9E36A or Q7M86A).

NOTE: Kit includes (qty. 2) 6 foot hoses for facility water connection which terminate to 2 inch sanitary fitting for facility connection. Optional stainless steel adapters include Q1V81A, (qty. 2) 2 inch sanitary fitting to 2 inch female BSPT and Q1V82A, (qty. 2) 2 inch sanitary fitting to 2 inch female NPT.

NOTE: Customer required to provide 2 inch male BSPT or NPT fitting.

HPE ARCS IEC60309 220-415v 4.5m INTL Power Cord

HPE ARCS IEC60309 220-415V 4.5m INTL Power Cord

872171-B21

NOTE: 1 vertical PDU bracket included. Select 1 kit per cooling unit.

HPE ARCS NEMA L22-20 4P/5W 277-480V 4.5m NA Power Cord

HPE ARCS NEMA L22-20 4P/5W 277-480V 4.5m NA Power Cord

872174-B21

NOTE: 1 vertical PDU bracket included. Select 1 kit per cooling unit.

HPE Universal 1U Filler Panels

Blanking panels are made from high grade molded plastic, and designed to be installed without tools. Using blanking panels is recommended to ensure proper airflow in unused rack U space.

HPE 1U 10-pack Black Universal Filler Panel

BW928A

NOTE: Pack of 10

HPE 1U 100-pack Black Universal Filler Panel

BW929A

NOTE: Pack of 100

Configuration Information

HPE Install ARCS SVC Flexible Support

HPE Install ARCS SVC

HA113A1#5CW

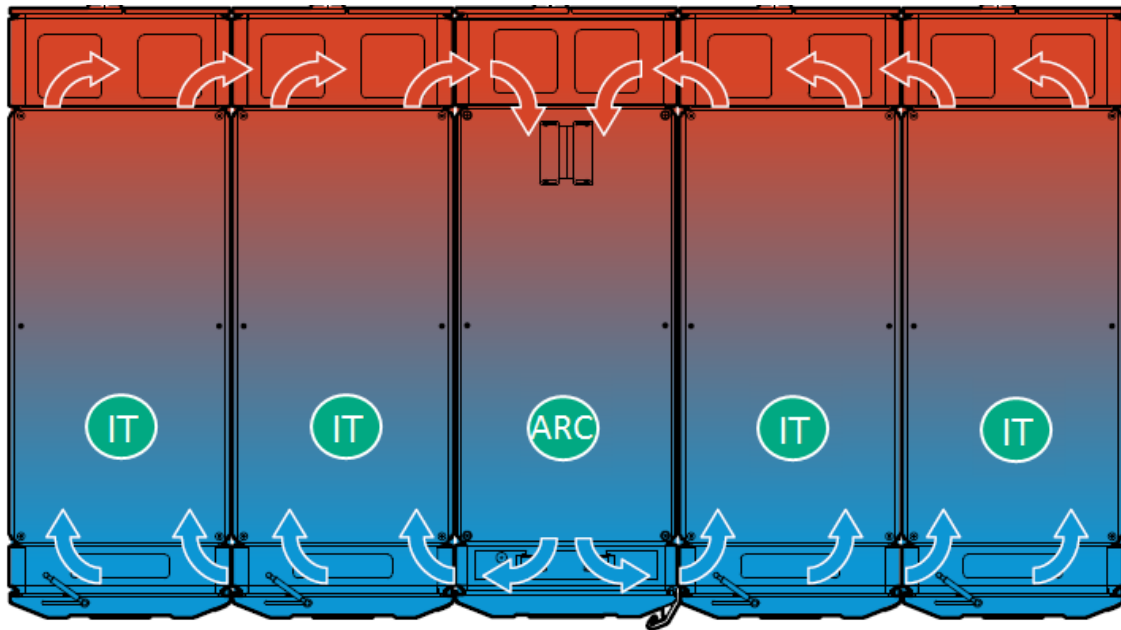
HPE Install ARCS SVC Fixed Support

HPE Installation Adaptive Rack Cooling System Service

UE005E

NOTE: Service Deployment activities for HPE Adaptive Rack Cooling System may include:

- Installation of the HPE Adaptive Rack Cooling System, and relevant power options purchased on the same order and intended to go into HPE Adaptive Rack Cooling System.
- This service includes the verification of the HPE Adaptive Rack Cooling System
- The water flowing into the HPE Adaptive Rack Cooling System must meet the guidelines stated in the HPE Adaptive Rack Cooling System Site Preparation Guide
- Site preparation and water connection to the facility are not included in this service.



NOTE: Rack count dependent on configuration

NOTE: The HPE ARC System Rack (for IT equipment) ships separately on shock pallet and must be attached onsite.

Dimensions

	ARCS Cooling Unit	42U Rack	48U Rack
Height	78.7 in. (2,000mm)	78.7 in. (2,000mm.)	90.4 in. (2295 mm)
Width	23.6 in. (600mm)	23.6 in. (600mm.)	23.6 in. (600mm.)
Depth	65.3 in. (1,660 mm)	65.4 in. (1,660mm.)	65.4 in. (1,660mm.)
Shipping Height (on skid)	86.5 in. (2,197mm.)	86.5 in. (2,197mm.)	97.44 (2,475mm.)
Shipping Width (on skid)	40 in. (1,016mm)	40 in. (1,016mm)	39.37 in. (1000mm.)
Shipping Depth (on skid)	72.84 in. (1,845mm)	72.84 in. (1,845mm)	72.84 in. (1,845 mm.)
Ramp Length	109 in. (2,769 mm.)	109 in. (2,769mm.)	109 in. (2,769mm.)
Offloading Ramp Clearance	21.5 ft.	21.5 ft.	21.5 ft.
Weight	Net	1,423 lbs. (645kg)	395 lbs. (179 kg)
	Shipping	1,614 lbs. (732 kg)	680 lbs. (308 kg)

Technical Specifications

Load	Static	N/A	3,000 lbs. (1,364)	3,000 lbs. (1,364 kg.)
	Dynamic	N/A	3,000lbs. (1,364)	3,000lbs. (1,364 kg.)
Color	Doors	Black	Black	Black
	Frame	Black	Black	Black
Warranty	ARCS 42U and 48U Rack	3-3-3	3-0-0	3-0-0

Environment-friendly Products and Approach End-of-life Management and Recycling

Hewlett Packard Enterprise offers end-of-life **product return, trade-in, and recycling programs**, in many geographic areas, for our products. Products returned to Hewlett Packard Enterprise will be recycled, recovered or disposed of in a responsible manner.

The EU WEEE Directive (2012/19/EU) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the **[Hewlett Packard Enterprise web site](#)**. These instructions may be used by recyclers and other WEEE treatment facilities as well as Hewlett Packard Enterprise OEM customers who integrate and re-sell Hewlett Packard Enterprise equipment.

Protect your business beyond warranty with HPE Support Services

HPE Pointnext provides a comprehensive portfolio including Advisory and Transformational, Professional, and Operational Services to help accelerate your digital transformation. From the onset of your transformation journey, Advisory and Transformational Services focus on designing the transformation and creating a solution roadmap. Professional Services specializes in creative configurations with flawless and on-time implementation, and on-budget execution. Finally, operational services provides innovative new approaches like Flexible Capacity and Datacenter Care, to keep your business at peak performance. HPE is ready to bring together all the pieces of the puzzle for you, with an eye on the future, and make the complex simple.

Parts and Materials

Hewlett Packard Enterprise will provide HPE-supported replacement parts and materials necessary to maintain the covered hardware product in operating condition, including parts and materials for available and recommended engineering improvements.

Parts and components that have reached their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual, product quick-specs, or the technical product data sheet will not be provided, repaired, or replaced as part of these services.

The defective media retention service feature option applies only to Disk or eligible SSD/Flash Drives replaced by Hewlett Packard Enterprise due to malfunction.

More Information <http://www.hpe.com/services>

Summary of Changes

Date	Version History	Action	Description of Change
03-Dec-2018	Version 1	Created	New QuickSpecs



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